



Catalogue Technical Appliances

Edition 2013

Fields of Application

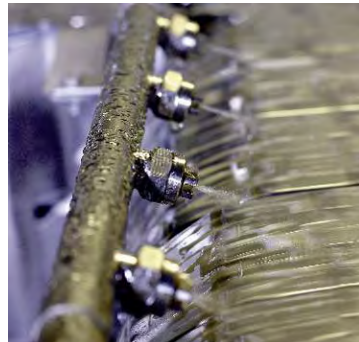
Food



Institutional



Beverage



Farm



Service



Contract
Manu-
facturing



Engineering



Water
Treatment



Contents

1 Foam Cleaners



2 Dosing Pumps



3 Small Dosing and Disinfection Units



4 Dosing Units and Peristaltic Pumps



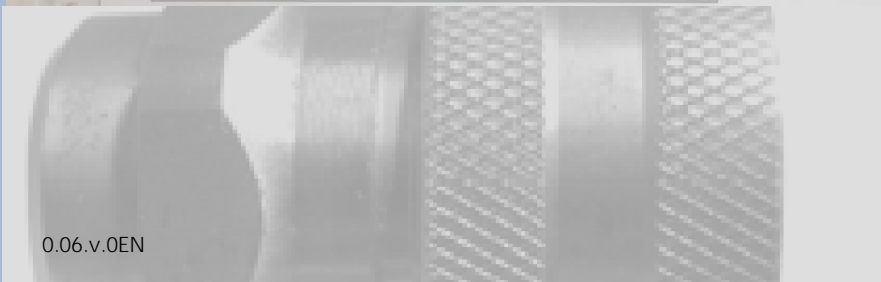
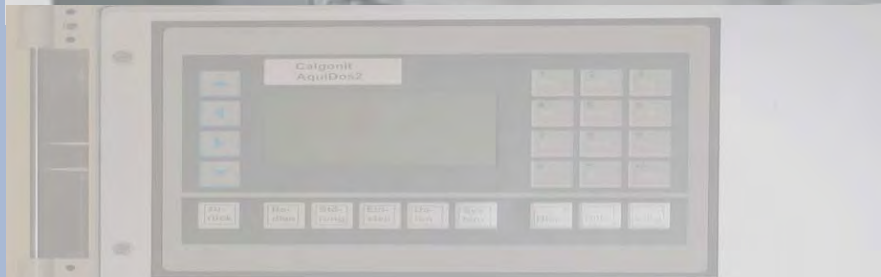
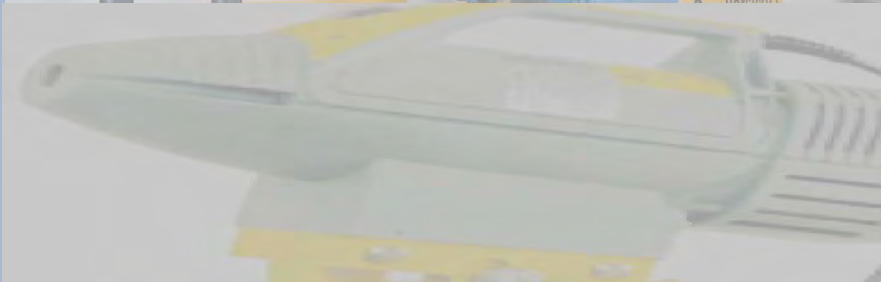
5 Sumps



6 Personal Hygiene Technological Hygiene Systems



Contents



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Appendix

Product Catalogue Technical Appliances

Foam Cleaning

Status 2012

cal^vatis
calgonit
industrial



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Types of Foam cleaning and rinsing systems

- Systems with **local** chemical detergent supply
- Systems with **central** chemical detergent supply
- Combinations of the above system types
- Container-type foam cleaners
- Systems with central pressurised-water and chemical detergent supply

Criteria relevant to dimensioning cleaning and rinsing systems

- Central or local chemical detergent supply
- Number of satellites to be operated in parallel
- Supply-water temperature and water hardness
- Supply-water pressure and available water quantity
- Dimension of water-supply pipe
- Detergent to be used

Calvatis systems offer the following performance features

- Concentration of the chemical products can be preset
No manipulation by cleaning staff
- Demand-based premixing of cleaning solution
No disposal of residual quantities
- Optimum use of chemical detergent
Reduces waste of chemical detergent
- Low water consumption
- Optimised cleaning effect thanks to:
 - > Optimum water pressure
 - > Constant concentration of chemical detergent
 - > Excellent foam quality
- Easy to use
 - > Short set-up and clean-up times
 - > No handling of chemicals

Benefits of central chemical detergent supply:

- No system set-up time (no preparation of cleaning solution, time saved for each cleaning operation: approx. ½ h)
- Preparation of cleaning solution goes without “inhibition”
- No chemical substances (cleaning concentrates) within production areas
- Application of major packages, including refillable containers
- Reduction of empties (pails or casks) by 100%
- No disposal problems
- Cost savings thanks to inexpensive large packages
- Constant quantity-based dosing
- No excessive concentration
 - > Saves detergents and disinfectants
 - > Conserves surfaces as zinc, non-ferrous metals, aluminium, etc.
- Only minor wastewater fluctuations due to fluctuations in concentration
 - > Relief of sewage plants
- Constant cleaning quality even in case of changing cleaning personnel or service-provider, as concentration and foam quality of detergent or disinfectant are preset invariably
- No risk of contamination in hoses, as a single hose is used to clean (acidic or alkaline), disinfect and rinse
- Exclusion of recontamination after final rinsing
- Low energy costs
 - > Only requires cold-water connection (3 bar)
- Due to savings in water and energy consumption, shorter working time, reduced detergent quantities and less corrosion on surfaces to be cleaned – the system pays for itself quickly

Mobile foam cleaning systems stand for a flexible solution to all conventional cleaning processes and are also used to extend stationary systems and satellites.

These systems combine proven components of foaming, cleaning and disinfection technology integrated in a single cart.

Such carts are supplied with operating product such as water and pressurised air either locally – i.e. by connecting them to the installed water and pressurised-air network – or via an integrated pressuriser. An autonomous pressurised-air supply system is possible, too

Example of a compact foam cleaning station with integrated pressuriser: FSD Mobil :

The integrated pressuriser pump ensures constant water pressure and thus foam quality independent of in-building supply installations.

The FSD Mobil unit is equipped with supports for product and supply hoses, foam lances and a container for the detergent and disinfectant.

Its ergonomic structure makes it an easy-to-operate cart, and its space-saving conception makes handling and storing a child's play.

Benefits

Flexible due to mobile cart design

Easy to operate

Also removes more resistant soiling

Foaming/disinfection also in inaccessible places

Independent pressure supply

Supply hose

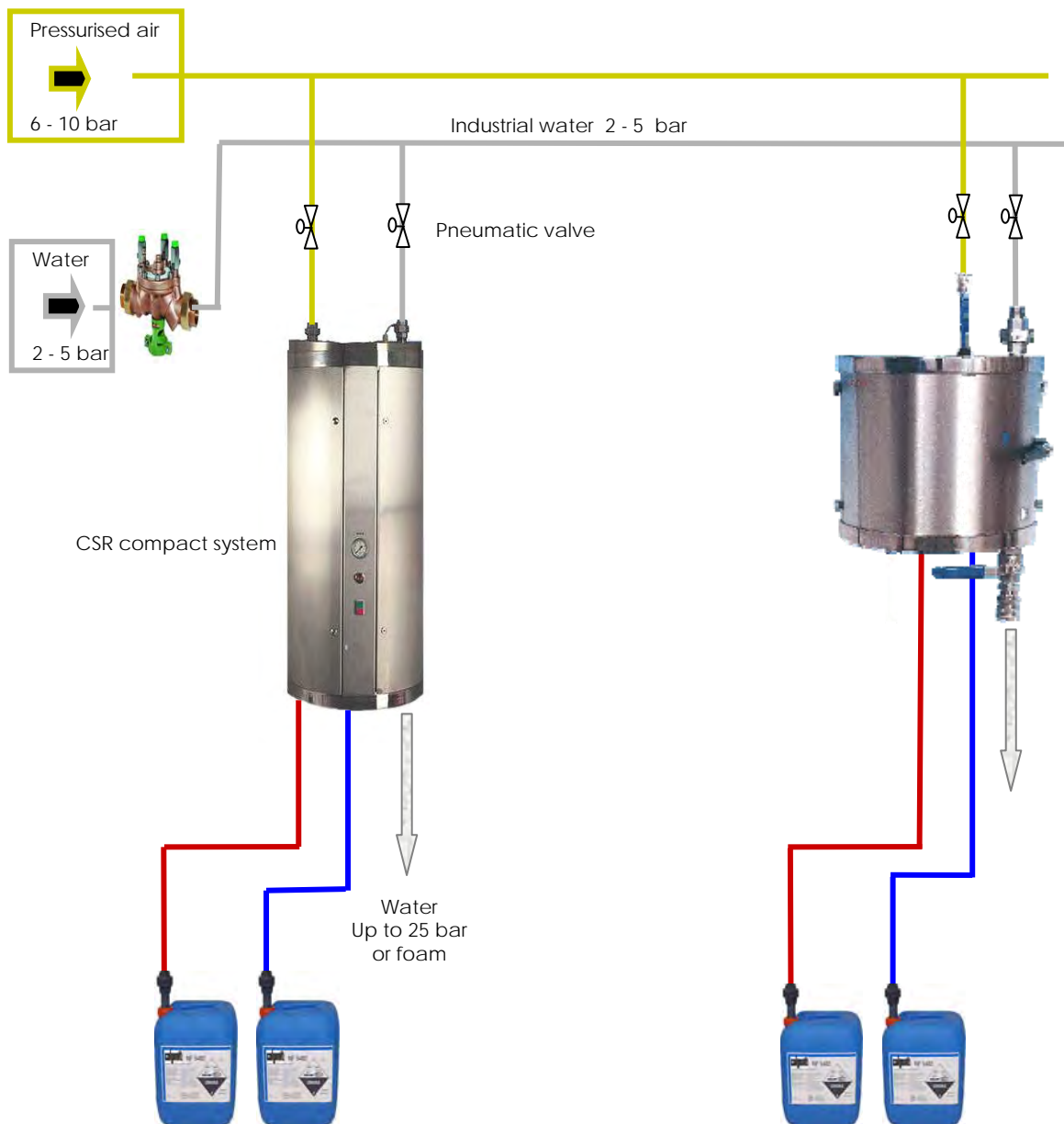
Detergent and
disinfection

Mobile cart



These systems allowing for individually selecting the desired detergent and disinfectant for specific local equipment offer greatest possible flexibility to meet the most different cleaning requirements.

The Calvatis CSR system is already equipped with all components required for any hygienic operation (rinsing, foaming and disinfection). Fully extended, the system controls the operation of up to seven satellite stations.



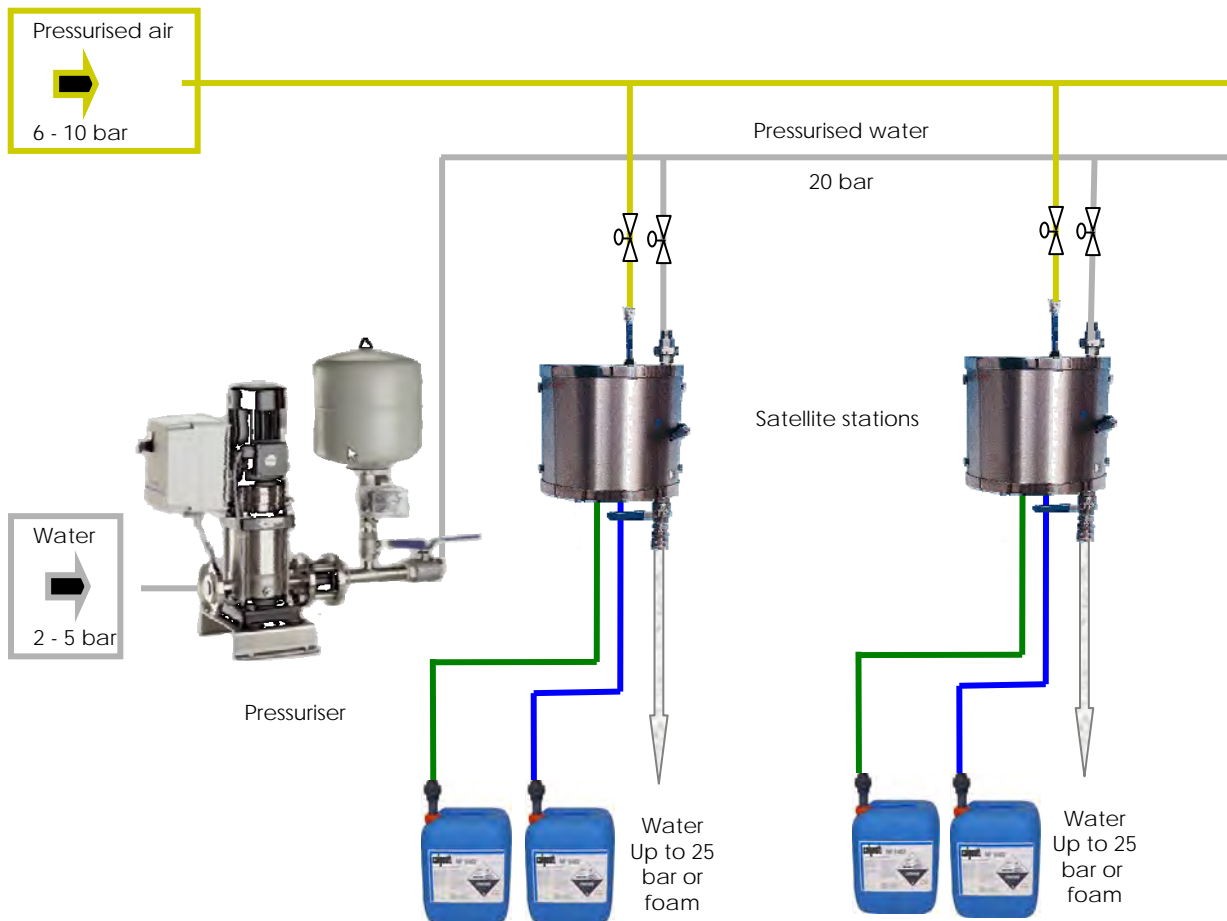
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Foam Cleaning Systems with Central Pressurised-water and Local Chemical Detergent Supply

Foam Cleaners

A foam cleaning system is composed of a pressuriser unit and its satellite stations. For efficiency reasons the satellite stations are placed within the building such that all cleaning processes can be carried out wherever needed and meet the requirements of the selected detergent.

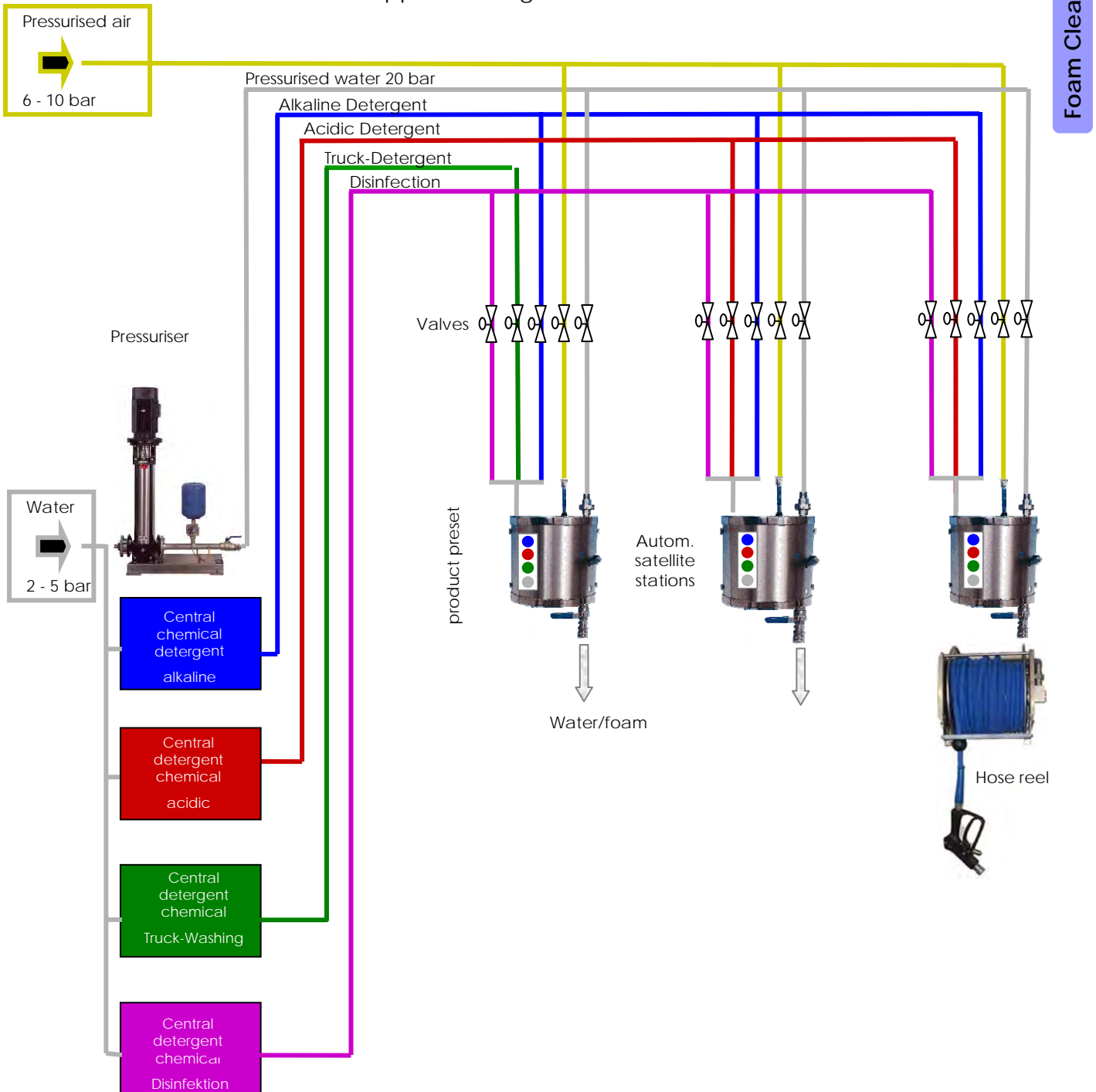
Such cleaning system ensures that all satellite stations can be centrally supplied with pressurised water and pressurised air via the installed pipe or pressurised-air grid. Each satellite station is equipped with a separate detergent and disinfectant supply container (pail).



Foam Cleaning Systems with Central Pressurised-water and Central Chemical Detergent Supply

Foam cleaning systems with central chemical detergent supply are systems supplied with detergents from a central chemical substances room.

The dosing technology to prepare the cleaning solvent ensures constant and consistent concentration of the applied detergent.



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System and Equipment Engineering

Pressurised-foam Units for Spraying and Foaming



Foam Cleaners

Container-type Foam Cleaners, BE Series

Pressurised-air-operated stainless-steel container-type foam cleaners for mobile disinfection and foam cleaning.

This type of foam cleaners allows universal cleaning of floors, walls, ceilings and machinery.

Benefits

- Flexible due to mobile design
- No power supply required
- Easy to handle
- Foaming and disinfection also possible in areas hard to access

Scope of delivery

- Air and product hose
- Injector with ball valve
- Foam and flat-jet nozzle



Name of Item	Volume	Operating pressure (max.)	Product hose	Pressurised air hose	Weight	Capacity sufficient for ca.	Dimensions L x W x H	Item No.
	[Litre]	[bar]	[m]	[m]	[kg]	[m ²]	[cm]	
BE 20	20	6	6	10	16	40	45 x 52 x 105	86520101
BE 50	50	6	10	20	32	100	55 x 61 x 90	86520107
BE120	120	6	10	20	39	300	65 x 72 x 100	86520102

System and Equipment Engineering

Pressurised-foam Units for Spraying and Foaming



Accessories for Container-type Foam Cleaners, BE Series

Foam Cleaners

Name of Item	Accessory	Compatible with	Item No.
PVC-fabric hose	Ø 9/15 mm	BE20	86340001
	Ø 12/18 mm	BE50	86340003
Product hose BERGIN DN 12 80 bar/20°C 40 bar/70°C As per Food Directive 2007/19/EG	Accessory sold by metre	BE120	86340201
Pressurised air-hose	12,5 m long, Connections DN 7, 2 mm	BE20 BE50 BE120	83000307
Foam pistol ST 2700	Supply ID 3/8", outlet ID 1/4"	BE20 BE50 BE120	86510211
Foam nozzle 3/8" - 63/60 SS		BE50 BE120	86510007

Accessory kits, BE Series

Name of Item	Compatible with	Item No.
Foam lance with pistol ST 2700 Foam lance pipe, nozzle 40/50	BE20	83000316
Angled foam lance ST 2700 Foam pistol, nozzle 63/60	BE50 BE120	86510103

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System and Equipment Engineering

Foam Cleaning



Foam Cleaners



Compact Foam Station FS

The Calvatis **Foam Box FS** is conceived for foaming or spraying aqueous detergents and disinfectants. The unit first prepares diluted solutions from concentrates which are then foamed with the aid of pressurised air. Our **Foam Box FS** can be deployed to clean and disinfect various surfaces. It may be applied either as a stationary unit firmly attached to a wall or as a mobile unit integrated in a cart.

The cart is equipped with supports for the product and supply hoses, foam lances and the container for the detergent or disinfectant. Its ergonomic design offers various operating benefits, and its space-saving conception makes handling and storing a child's play.

Benefits

- Easy to operate
- Standard water pressure from 3-5 bar is sufficient
- Also removes more resistant soiling
- Foaming/disinfection also in places hard to access
- No power supply required (pressurised air as primary energy)
- Flexible thanks to mobile-cart design

Name of Item	Volumetric flow rate	Operating pressure (max.)	Product hose	Water hose	Air hose	Item No.
	[m³/h]	[bar]	[m]	[m]	[m]	
FS stationary	0,3	5	15	12,5	12,5	83000368
FS mobile			Integrated in a cart			83000367

System and Equipment Engineering Foam Cleaning



Accessories Foam Box, FS Series

Foam Cleaners

Name of Item	Accessory	Item No.
Pressurised air-hose	12,5 m long, Connection DN 7, 2 mm	83000307
PVC-fabric hose	Ø 12/18 mm	86340003
Hose tail 1/2" outer thread, SS	13 mm SS For connection to product hose or lance	86200804
Cart		87092112
Foam hose 300 mm	Foam nozzle 80/200	86510104
Foam lance adapter	Adapter 18 x 1,5 - 1/2" ID/OD SS	86510107
Ball valve 1/2", internal thread		86411303
Pressurised-air diaphragm pump	Duodos 10 PP 500 l/h	87092144

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System and Equipment Engineering

Foam Cleaning



Foam Cleaners



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Compact foam Station FSD

The Calvatis **Compact Station FSD** can be used to clean and disinfect walls, floors and machinery. An integrated pressuriser pump ensures constant foam quality.

Moderately increasing the operating **pressure** up to a **maximum of 10 bar** means that aerosol formation is minimised. Thus the **Compact Station FSD** stands for the optimum solution for cleaning sensitive areas.

With its cabinet design the Calvatis **Compact Station FSD** is available for wall attachment or optionally also integration in a cart for mobile deployment.

The cart is equipped with supports for the product and supply hoses, power supply cable, foam and rinse lances and supports for the detergent and disinfectant pail.

Its ergonomic and space-saving design offers various operating benefits and makes handling and storing a child's play.

Benefits

- Easy to operate
- Pressuriser of its own
- Also removes more resistant soiling
- Foaming/disinfection also in places hard to access
- Flexible application if mounted on cart

Name of Item	Volumetric flow rate	Operating pressure (max.)	Product hose	Pressurised-air hose	Power supply	Item No.
	[m ³ /h]	[bar]	[m]	[m]		
FSD stationary	1,8	10	12,5	12,5	230V/50Hz	83000009
FSD mobile	1,8	10	12,5	12,5	230V/50Hz	83000008

System and Equipment Engineering Foam Cleaning



Accessories Foam Box, FSD Series

Foam Cleaners

Name of Item	Accessory	Item No.
Pressurised-air hose	12,5 m long, Connection DN 7, 2 mm	83000307
PVC-fabric hose	Ø 12/18 mm	86340003
Low-pressure valve, blue ½" internal thread	Rubber-jacketed, quick coupler, coupler protector	87091719
Swivel joint 1/2" ID/OD SS	Throughput 160 lpm Nominal pressure 200 bar	86510216
Hose tail 1/2" SS, Øa 13 mm	For connection product hose or lance	86200804
System rinse lance 650 mm, Crimped with nozzle 25/40, Blue	with system plug	87092206
System disinfection nozzle 30/40 yellow	with system plug	86510120
System rinse nozzle 25/40 Blue	with system plug	86510119
System foam nozzle 50/200 white	with system plug	86510132
Nozzle kit to preset concentrate	Different colours, 14 parts concentrate range 0,2 – 10 %	87092211
Lance support SS, for wall attachment	4 lances/system nozzles	87092126
Cart		87092112
System plug 1/2" ID SS		86202001

System and Equipment Engineering

Central Cleaning Systems



Foam Cleaners



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Compact System, CSR Series

The compact systems of our CSR series are composed of a pressure booster and an integrated satellite station. A total of no less than seven further satellite stations can be supplied with water at the same time. Our CSR series is designed for conducting all cleaning tasks, be it rinsing, foaming or disinfection. Its electric extraction-based control system makes sure that the pump is switched on and off at the right time. Its dry-run protector is controlled via a pressure switch.

Further features:

- Digital ECO system control unit
- Manometer on supply and outlet sides

Technical specifications
for integrated satellite:

Water supply temperature:	70°C (max.)
Pressure gauge:	4 bar (min.)
Required air volume:	150 lpm(min.)
Water consumption (foaming):	6- 8 lpm

Name of Item	Max. water discharge	Jet intensity	No. of satellites operated in parallel	Weight	Supply-side water gauge	Max. supply-side air pressure gauge	Max. hose length	Pipe diameter	Dimensions L x W x H	Item No.
	[m³/h]	[lpm.]		[kg]	[bar]	[bar]	[m]		[cm]	
CSR 10/250 E	13	16- 200	7- 8	167	min. 2 max. 25	10	25	1 ½"	140 x 66 x 39	86100556
CSR 5/270 E	7,5	10- 125	4- 5	142	min. 2 max. 25	10	25	1 ¼"	140 x 66 x 39	86100905
CSR 3/250 E	3,5	5- 75	2- 3	115	min. 2 max. 25	10	25	1 ¼"	115 x 66 x 39	86100553

System and Equipment Engineering Pressure Booster Pumps



Pressurisers, JRP Series

With our **JPR series** pressure booster pumps pressurized water can be conveyed to a max. of eight satellite stations at the same time.

Its electric extraction-based control system makes sure that the pump is switched on and off at the right time. Its dry-run protector is controlled via a pressure switch.

Further features:

- Digital ECO system control unit
- Manometer in supply and discharge sides
- Alternatively available without housing



Foam Cleaners

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Name of Item	No. of satellite stations (operated in parallel during rinsing)	Nominal output under pressure	Dimensions L x W x H	Housing	Ref. No.
	[-]	[l/ min]	[cm]		
JPR 10/250 E	7- 8	261	146 x 62 x 39	o	86100902
JPR 10/250 EB	"	"	"	-	Upon request
JPR 5/270 E	4- 5	125	146 x 62 x 39	o	86100903
JPR 5/270 EB	"	"	"	-	Upon request
JPR 3/250 E	2- 3	75	113 x 62 x 39	o	86100901
JPR 5/270 EB	"	"	"	-	Upon request

System and Equipment Engineering

Satellite Stations



Foam Cleaners



Satellite Station SR 25

Our type SR 25 satellite stations are designed for operation with pressurisers up to 25 bar. They are available in three variants.

Locally stored detergent or disinfectant concentrates can be dosed or foamed via adjustable injectors

All components are hygienically safe and protected thanks to their integration in a stainless-steel housing.

Benefits:

- Robust and compact design
- Easily adjustable product concentration
- Easy handling
- Minimum maintenance requirements
- Back-pressure valve

Requirements:

Required pressurised-air volume
(at 4 – 6 bar)

>160 lpm

Water consumption:

Rinsing

approx. 25 lpm

Foaming/disinfection

approx. 7 lpm

product concentration:

0,5 - 8%

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Name of Item	Suction system	Foaming	Rinsing	Foam disinfection	Spray disinfection	Item No.
SR 25-1	Single suction system	o	o			87092057
SR 25-2	Double suction system	o	o		o	87092122
SR 25-2P	Double suction system	o	o	o		87092102
Cart						87092112

System and Equipment Engineering

Satellite Station



Possible Configuration of Satellite Stations

Foam Cleaners



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Exemplary configuration:

- Satellite Station, type SR 25
- Hose Bergin DN 12; 25m
- Hose reel
- Low-pressure valve, blue
- Foam pistol
- System rinse lance, crimped, nozzle 25/ 40
- System rinse nozzle, 25/40 SS, protector, blue
- System foam nozzle 50/200 SS , protector, white
- System disinfection nozzle 30/40 SS, protector, yellow
- Cart

Name of Item	Mounting	Item. No.
Pre-assembled satellite station equipped with above components	to wall	Upon request
	on cart	Upon request

System and Equipment Engineering

Piston Air Pump



Piston Air Pump PK 201



Thanks to its design and mobile conception, the Calvatis **PK 201** foam cleaner can be used for an unlimited range of applications and is particularly suitable for cleaning and disinfecting floors, walls and machines – even in places difficult to access. The **PK 201** Piston Air Pump stands for the **cost- and time- efficient** solution for foaming and disinfecting large surfaces. The cleaning solvent is sucked from a container or cask and then applied to the target to be cleaned or disinfected via a product hose and lance .

Benefits

- May be turned into mobile unit if mounted on an additional cart
- Easy connection to pressurised-air network
- No power supply required
- Output freely adjustable
- The pump is equipped with a 2" threaded connector and can thus be attached to all conventional 200 litre casks with a bunghole in their upper lids to allow for stationary operation

Fig.: Foam cleaner PK 201
with cart and cask

Name of Item	Product hose	Length of suction pipe	Operating pressure	Foam lance	Weight	Item No.
	[m]	[mm]	[bar]	[mm]	[kg]	
PK 201	12	1.000	3,5- 10	800	14	83000301
Cart for 200 l cask	650 mm (Width)	850 mm (Lengh)	1.000 mm (Height)		23	86120404

System and Equipment Engineering

Piston Air Pump



Accessories Piston Air Pump PK 201

Foam Cleaners

Name of Item	Accessory	Item No.
Pressurised-air hose	12,5m length, Cap DN 7, 2 mm	83000307
Product hose length 12 m	Grey, standard hose ½" outer thread, union nut M22 x 1,5	86340200
Double nipple for Name of Item 86340200	½" outer thread, M22 x 1,5 outer thread	86400240
Foam lance with ball valve	Nozzle 80/200 ½" ID, ball valve MSv	83000311
Ball valve 1/2"		86411303
Foam lance adapter	Adapter 18 x 1,5 – ½" ID/OD SS	86510107
Clamping ring	for PK 201 attachment to IBC container	86120401
Telescopic carton for PK 201	Shipping carton	86720002

System and Equipment Engineering

Foam Cleaning



Mobile Foam Cleaner CV-1

Description:

The mobile Calvatis **CV-1 foam cleaner** is conceived for the flexible cleaning of systems and equipment also under confined conditions. Its operation requires connection to the power, pressurised-air and service water networks.

The **low-pressure** cleaner allows for efficient and at the same time gentle cleaning.

Via a central mode switch the operator can select each operation mode (rinse, foam, disinfect).

Scope of delivery:

- Foam/rinse lance
- System plug and nozzles
- Product hose (12.5 m)
- Compressed-air hose

Optional:

- Pressure booting pump 40 bar
- Hose reel
- Compressor

Benefits:

- Compact
- Robust
- Easy to use/handle
- Mobile cart
- Single-lever operation
- Automatic rinse lance
- Minimal maintenance, high operational availability

Technical specifications:

Water supply pressure:	1,5 - 5 bar min./max.
Water temperature	60 °C max.
Water outlet pressure:	23 bar max.
Water quantity foaming:	5 - 10 lpm
Water quantity rinsing:	20 – 30 lpm
Water connection:	¾" GK coupler
Air pressure:	4 - 6 bar
Air quantity:	ca. 150 lpm
Air connection:	7,2 mm plug-in coupler
Power supply:	230/400 V, 50 Hz, 3 AC
Power input	CV1: 3 kW
	CV1K: 4,5 kW (optional)
Electric connection:	CEKON plug 16 A
Dimensions (B x W x H mm):	750 x 1.200 x 960
Product hose:	½"
Weight:	ca. 130 kg

Item No.	83000490
	83000491(with compressor)



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System and Equipment Engineering Pressurisers



Pressurisers PS Series

The Calvatis **PS series** pressurisers meeting all hygienic requirements encompasses robust multi-stage centrifugal pumps requiring minimum maintenance.

The systems generate a water outlet pressure of up to 25 bar. Their design depends on the number of supply units (or satellites) to be operated in parallel.

Benefits:

- Optimum cleaning thanks to a max. water pressure of 25 bar
- Integrated dry-run protector
- Temperature switch-off
- Frequency converter with constant pressure controller

Technical specifications:

Water outlet pressure: 25 bar (max.)
Water supply pressure: 2 - 5 bar
Temperature: 70 °C (max.)



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Name of Item	Suction nozzle	Pressure nozzle	Max. output under pressure	Power loutput	Item No.
			[lpm.]	[kW]	
PS 4	DN 32	RP 1 ¼	17- 140	5,5	86100913
PS 6	DN 40	RP 1 ½	17- 210	7,5	86100917
PS 10	DN 50	RP 2	17- 390	15	86100915



High-pressure Foam Lance LS 10

The Calvatis High-pressure Foam Injector LS 10 stands for the ideal solution for pre-cleaning soiled surfaces on vehicles and machines.

Benefits

- Also removes more resistant soiling
- Easy connection to high-pressure cleaner
- Adjustment of concentration by turning



Water-grid Pressure Foam Lance SG 2

Conventional in-building water-grid pressure (up to 5 bar) and thus ensures efficient and gentle cleaning. All parts of the lance coming in touch with the applied foam detergent are fully made of plastic.

Benefits

- Easy connection to water supply pipe
- Adjustment of concentration via coloured nozzle inserts



Foam Gun

Easy handling, as usual water-grid pressure is already sufficient. A throughput of 6 litres per minute ensures quick cleaning.

Benefits

- Easy connection to water supply pipe
- Adjustment of concentrate by turning

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Name of Item	Volume of container	Max. water temperature	Throughput	For connection to	Item No.
	[Litre]	[°C]	[lpm]		
LS 10*	2	60	5 (70 bar) up to 30 (200 bar)	High-pressure Cleaner * In combination with high pressure cleaner coupler 8610136 required	86510135 *see accessories
SG 2	3	40	8	Water supply grid	86510117
Foam gun	2	40	6	Water supply grid	86510137

System and Equipment Engineering Lances



Accessories Foam Lances LS 10

Name of Item	Accessory	Item No.
Coupler LS 10	incl. reducer 3/8" internal thread 1/4" outer thread, brass AR1 B threaded connection M22-1/4" ID brass	86510136
Sieve for LS 10	PVC fabric	87091843
Diaphragm LS10	Orifice 25 x 0,5 mm SS	87092639
Concentrate adjustment shaft LS 10		87092834
O-Ring for lance	1,78 x 20,35 mm Viton	87093132
Suction hose	ø 5/8 x 230 mm PVC	87093131
Container	2 litres, plastic	86510118

Foam Cleaners

Accessories Foam Lances SG 2

Name of Item	Accessory	Item No.
Foam insert SG 2		87092813
Nozzle kit	different colours, 14 parts concentrate range 0,2 – 10 %	87092211
Suction sieve for SG 2		87093120

Automatic Hose Reel, Type ST 40



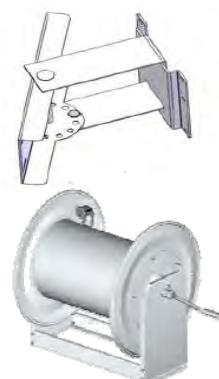
Calvatis' robust **ST 40** hose reel series is equipped with an automatic spring return. The swivel joint reliably prevents the hose from twisting.

Optionally, the hose reel is also available with a wall-mounted slewing bracket. This allows for high operator convenience and extension of the operator's scope of action without kinking of the hose during the cleaning process.

Benefits

- Max. reel capacity: up to 30 m, ½" hose
- With swivelling joint, no twisting of hose
- Wall-mounted slewing bracket for increased operator convenience
- Pre-set click-stops
- incl. hose stopper (1 kit)

Name of Item	Accessory	Item No.
Automatic hose reel		
Stainless steel, w/o accessory		
ST40/12/2e	for hose ½" up to 25 m	86510206
ST40/19/2e	for hose ¾" up to 30 m	86510203
Wall-mounted slewing bracket		
SKW 40/1e	for ST40/12/2e	86510215
SKW 40/2e	for ST40/19/2e	86510217
Manual hose reel		
Stainless steel, w/o accessory		
STKi2 20/12	for hose ½" up to 25 m	86510222



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System and Equipment Engineering Hoses, Reels and Connectors



Accessories for Hose Reels

Foam Cleaners

Name of Item	Accessory	Item No.
Universal hose stopper	for hose ø 10-34 mm	87092497
Washer	1/2"	86202013
Product hose BERGIN DN 12 80 bar/20°C	2,5 m	87093154
40 bar/70°C	12 m	87093488
with outer thread AGR 1/2" made of stainless steel as per Food Directive 2007/19/EG	25 m	87093126
Product hose HD	2,5 m	87093121
Hose with steel wire reinforcement , type 1SN	15 m	87093652
160 bar/90 °C with outer thread	25 m	87091433
AGR 1/2" made of stainless steel		
Kink protector for product hose DN 12	blue	86340210
Hose support for product hose	Stainless steel	86510201



Hoses also available by the metre

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System and Equipment Engineering

Hoses, Reels and Connectors



Foam Cleaners

Accessories for Hose Reels

Name of Item	Accessory	Item No.
 Rotary lead-through 1/2" Type WDH	12/AL- anodised 3/8"-1/2" OD/ID NW12	87092341
 Foam gun Stronghold 400 with system coupler lightweight	Swivel joint and coupler protector Connection 1/2" ID max. 150 °C max. 100 bar 100 lpm	86510229
 Foam gun ST3100 with system coupler	Connection 1/2" ID max. 150 °C max. 60 bar 100 lpm	86510208
 Foam gun ST2725 with system coupler	Swivel joint and coupler protector Connection 1/2" ID max. 150 °C; max. 80 bar 80 lpm	86510225
 Swivel joint for gun ST3100	1/2" ID/OD SS Nominal pressure 200 bar Permissible pressure 220 bar Throughput 160 lpm	86510216
 Repair kit for hoses DN 12	For screwing, left/right thread reusable max. 50 bar; max. 70 °C Hose connection 1/2" OD SS	86340214
 Connection adapter SS 1/2" union nut	for hoses 1/2" OD, conical	86202012
 Double nipple SS 1/2" - M22 x 1,5	For hose with union nut M22 x 1,5	86200240
 Injector support SS for attachment to wall	4-fold	87092126

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System and Equipment Engineering Accessories for System Cleaners



Accessories System Cleaners

Name of Item	Accessory	Item No.
Dosing valve, adjustable		87092128
Air valve with handle		87092254
Mixing chamber		87091412
T-grip for ball valve 1/2"		80100032
Ball valve 1/2" ID SS		86201603
Actuator		87092050
Sleeve 1/2" SS		86200903



Foam Cleaners

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System and Equipment Engineering

Accessories for System Cleaners



Foam Cleaners

Accessories

Name of Item	Accessory	Item No.
Nozzle wrench	For exchanging foam and rinse nozzles	87091970
Pressure controller with filter		87092016
Alternatively: Pressure controller 1/4" N204D00	without pressure gauge	86430504
Flow meter Novafix FF	Specification SC	87092543
Dosing valve for chemical substances 1/4"		87091986
Air valve with switch		87092506
Selector for air valve		87092006
Air-side backpressure valve pluggable	Connection 6 mm	86410408
	Connection 8 mm	86410407
Backpressure 1/2"		87092504
Air nozzle SS 2,0		87092200

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System and Equipment Engineering

Accessories for Foam Cleaners



Accessories

Name of Item	Accessory	Item No.
System plug max. 200 bar; 100 °C	3/8" ID SS	86202009
	1/4" ID SS	87091933
	1/2" OD SS	86202001
O-ring for system coupler	15,1 x 2,7 mm	86202010
	18,0 x 2,0 mm	86202011
Nozzle protector	blue	87091969
	white	86510128
	yellow	86510129
Rinse lance 300 mm	with adjustable nozzle outlet	86510101
Foam lance with nozzle 80/200 SS	300mm	86510104
	800mm	86510106
Nozzle 1/4" OD SS	25/05	86510013
	25/10	86510014
	15/30	86510002
	25/40	86510010
	40/30	86510003
	40/50	86510005
Foam nozzle 1/2" OD SS	80/200	86510000
Foam nozzle	FS 63-60° 3/8" ID SS for BE 50	86510007
Foam nozzle	80/200 1/2" ID SS	86510001



Foam Cleaners

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System and Equipment Engineering

Accessories for System Cleaners



Foam Cleaners

Accessories

Name of Item	Accessory	Item No.
	O-ring for air nozzle	80100022
	Washer 1/4"	87092021
	Washer for low-pressure valve	87091718

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System and Equipment Engineering Accessories for System Cleaners



Accessories

Foam Cleaners

Name of Item	Item No.	
Low-pressure valve, blue	Connector 1/2" ID SS max. 60 bar	87091719
Coupler with protector	Connector 1/2" a SS	86202007
System rinse lance, crimped nozzle 25/40 with system plug	650 mm	87092206
	1000 mm	86510130
	1500 mm	86510115
Connection adapter 1/2" Ü SS	For hoses 1/2" OD	86202012
Connection adapter 1/2" -M22 x 1,5 SS	For hoses with union nut M22 x 1,5	86200240
System nozzle with system plug:		
System rinse nozzle, blue	Nozzle 25/40	86510119
System foam nozzle, white	Nozzle 50/200	86510132
System disinfection nozzle, yellow	Nozzle 30/40	86510120
System coupler max. 200 bar; 100 °C	1/2" ID SS	86202000
	3/8" ID SS	86202004
	1/2" OD SS	86202006
System plug max. 200 bar; 100 °C	1/2" ID SS	86202001
	1/2" OD SS	86202002



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Product Catalogue Technical Appliances

calvatis
calgonit
industrial

Dosing Pumps

Status 2012



2.00.v.0EN

Dosing Pumps

Dosing Pumps



Application:

- Quantity-based admixture of chemicals
 - > in the water treatment area
 - > Control via contact water meter
- Admixture of chemical substance depending on measured value
 - > e.g. in the CIP area
 - > Bottle washers
- Time-controlled admixture of chemicals

Benefits:

- No personnel costs for dosing
- Saves resources thanks to exact dosing
- Safe hygiene chain
- Pulse-controlled dosing for filling up small quantities

System and Equipment Engineering

Dosing Pumps



Diaphragm Pump Alpha

The ProMinent Alpha motor-driven dosing pump is conceived for simple applications. It is particularly suitable for continuous dosing.

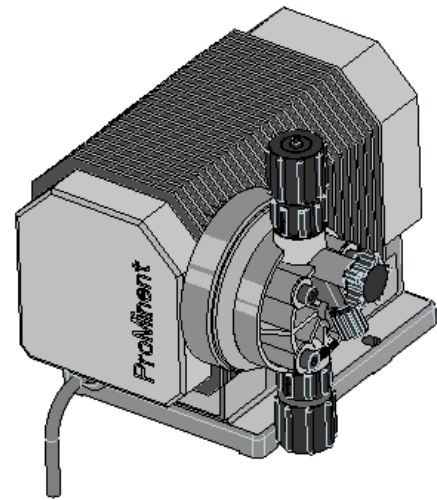
Benefits

- Control simply via power supply switch ON/OFF
- Adjustment of dosing quantity via stroke length in 10% steps from 0-100 %

Technical specifications

Output range: 0,5-18,5 lph
Counter-pressure: 4-10 bar
Material: PPE Polypropylene/EPDM
Stroke frequency: Constant
Power supply: 230 V, 50/60 Hz
with 2 m Euro plug

Connection kit: see Accessories Dosing Pumps



Dosing Pumps

Graphics and pictures may differ from original

Name of Item	Output at 50 HZ	Pressure	Item No.
	[lph]	[bar]	
ALPc1002PPE200A0	1,8 l/h	10	86100063
ALPc1008PPE200A0	7,7 l/h	10	86100064
ALPc0417PPE200A0	17,0 l/h	4	86100065
ALPc1004PPE200A0	3,5 l/h	10	86100067

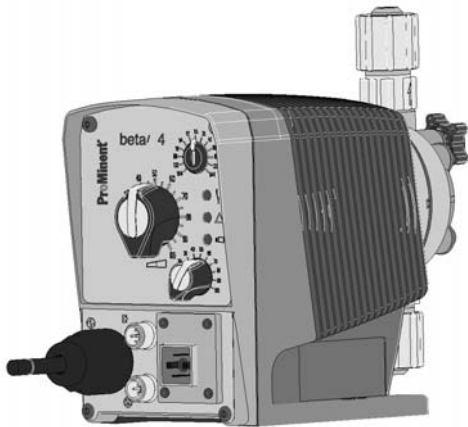
System and Equipment Engineering

Dosing Pumps



Diaphragm Pump Beta

Dosing Pumps



Graphics and pictures may differ from original

Quantity-based admixture of chemical substances for water treatment, with actuation via contact water meter. Admixture of chemical substances depending on measured value, e.g. in swimming pools. Time-controlled admixture of chemical substances in cooling-water cycles. Pulse-controlled dosing for filling up small volumes.

Benefits

- External control via potential-free contacts
- Connection for two-stage level switch
- 3-LEDs to indicate operation, warning and failure

Technical specifications

Stroke frequency:	10-100 % (10 Steps)
Power supply:	230 V, 50/60 Hz with 2m Euro plug
Connection kit:	see Accessories Dosing Pumps

Name of Item	Output	Pressure [bar]	Alkaline	Acidic	Self-venting	Item No.
BT4b1602PPE2000UA000000	2,2 l/h	16	o	-	-	86100051
BT4b1604PPE2000UA000000	3,6 l/h	16	o	-	-	86100052
BT4b0708PPE2000UA000000	7,1 l/h	7	o	-	-	86100053
BT4b1602PPB2000UA000000	2,2 l/h	16	-	o	-	86100098
BT4b1604PPB2000UA000000	3,6 l/h	16	-	o	-	86100099
BT4b0708PPB2000UA000000	7,1 l/h	7	-	o	-	86100100
BT4b1604PPE9000UA000000	2,7 /h	16	o	-	o	86100021
BT4b0708PPE9000UA000000	6,6 l/h	7	o	-	o	86100102
BT4b1604PPB9000UA000000	2,7 /h	16	-	o	o	86100032
BT4b0708PPB9000UA000000	6,6 l/h	7	-	o	o	86100103

System and Equipment Engineering

Dosing Pumps



Diaphragm Pump Gamma / L

Conceived for dosing detergents, defoamers and other additives. Quantity-based admixture of chemical substances, control via contact water meter. Admixture of chemicals depending on measured value , e.g. in CIP systems and bottle washers.

Optional

Time-controlled admixture of chemical substances.

Benefits

- External actuation via potential-free contacts
- Connection for two-stage level switch
- 3-LEDs to indicate operation, warning and failure



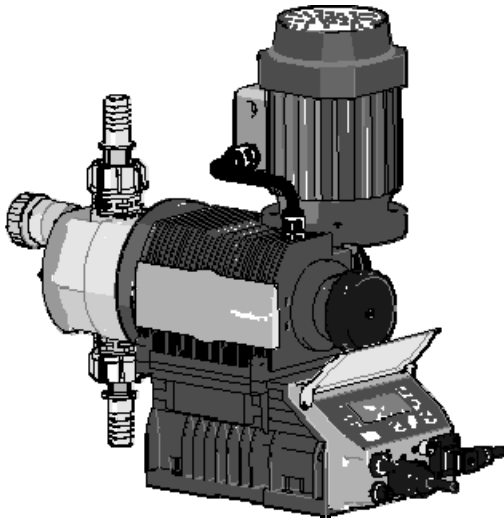
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Technical Specifications

Stroke frequency: Continuously adjustable, digital via LCD display
 Power supply: 230 V, 50/60 Hz with 2 m Euro plug

Name of Item	Output	Pressure [bar]	Alkaline	Acidic	Self-venting	Connection ID/OD [mm]	Item No.
GALa1601PPE250UA001000	1,1 l/h	16	o	-	-	6/12	86100000
GALa1602PPE250UA001000	2,1 l/h	16	o	-	-	6/12	86100084
GALa1005PPE250UA001000	4,4 l/h	10	o	-	-	6/12	86100003
GALa0708PPE250UA001000	7,1 l/h	7	o	-	-	6/12	86100092
GALa1601PPB250UA001000	1,1 l/h	16	-	o	-	6/12	86100007
GALa1602PPB250UA001000	2,1 l/h	16	-	o	-	6/12	86100093
GALa1005PPB250UA001000	4,4 l/h	10	-	o	-	6/12	86100094
GALa0708PPB250UA001000	7,1 l/h	7	-	o	-	6/12	86100095
GALa1005PPE950UA001000	3,6 l/h	10	o	-	o	6/12	86100077
GALa0708PPE950UA001000	6,6 l/h	7	o	-	o	6/12	86100097
GALa1602PPB950UA001000	1,4 l/h	16	-	o	o	6/12	86100090
GALa1005PPB950UA001000	3,6 l/h	10	-	o	o	6/12	86100072

Diaphragm Pump Sigma



Graphics and pictures may differ from original

Standard version (S1Ba)

Without in-built electronic equipment of its own.
Stroke length adjustment: manual (optionally with actuator or variable-speed drive).

Controlled version (S1Ca)

Microprocessor-controlled: optimum combination of speed-control and Stopp&Go operation, i.e. the pump operates within a wide control range allowing for individual fine tuning. Easy adjustment of individual pump functions via five programme keys. Large, backlit LC display. Plain-text indication of output in l/h or US gal/h. 3 LEDs indicating operation, warning and failure. Actuation via contact or analogous signals (e.g. 0/4-20 mA),
Protection Class IP 65.

Benefits

Quantity-based admixture of chemical substance
Admixture of chemical substance depending on measured value, e.g. dosing of acidic and alkaline chemicals for CIP systems or bottle washers
Pulse-controlled dosing

Technical specifications

Stroke frequency:

Continuously digitally adjustable via keyboard
large LCD display

Stroke length:

adjustment via self-locking rotary knob
in 1% steps (0-100 %)

Power supply:

230 V, 50/60 Hz

System and Equipment Engineering

Dosing Pumps



Diaphragm Pump Sigma

Name of Item	Output lph	Pressure bar	Connection G-DN	Cable 2 m	Additional manual calibration	Item No.
S1BaH12035PVTS470M000	35	12	3/4"-10			86100073
S1BaH07065PVTS470M000	65	7	3/4"-10			86100105
S1BaH04120PVTS470M000	120	4	1"-15			86100106
S1CaH12035PVTS470UA00000	42	12	3/4"-10	o		86100107
S1CaH07065PVTS470UA00000	63	7	3/4"-10	o		86100071
S1CaH04120PVTS470UA00000	117	4	1"-15	o		86100108
S1CaH07065PVTS470UA0000C	63	7	3/4"-10	o	o	86100131
S2BaHM16090PVTS470M000	82	16	1"-15			86100109
S2BaHM16130PVTS470M000	124	16	1"-15			86100110
S2BaHM04350PVTS470M000	350	4	1 1/2"-25			86100038
S2CaHM16090PVTS470UA00000	99	16	1"-15	o		86100111
S2CaHM16130PVTS470UA00000	125	16	1"-15	o		86100112
S2CaHM04350PVTS470UA00000	352	4	1 1/2"-25	o		86100113
S3BaH120190PVTS470M000	190	12	1 1/2"-25			86100114

Dosing Pumps

System and Equipment Engineering

Accessories Dosing Pumps

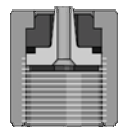
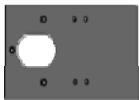
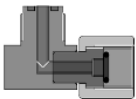


Accessories Dosing Pumps

Dosing Pumps



Name of Item	Accessory		Alpha Beta Gamma	Sigma	Item No.
Level cable, round plug, 3-pin	Actuation of 'low-level' message	2m	o	o	86120011
Pulse control cable, round plug, 5-pin	Actuation of pump via contacts	5m	o	o	86120006
		10m	o	o	86120007
Universal control cable, round plug, 5-pin	Actuation of dosing pump via potential-free contacts, analogous standard signals, and for switching pump ON/OFF	2m	o	o	86120012
		10m	o	o	87092444
Level monitoring for packages	Switching off a dosing pump via potential-free contacts		o	o	86010900
Wall bracket PPE	To support dosing pump, made of glass-fibre- reinforced plastic		o	o	86120008
Angular screw joint	To support multi-function valves on self-venting dosing heads		o		86120020
Adapter plate	To install dosing head vertically to wall		o		86120019
Connection kit	PP/EPDM double for hose	ID-OD ø 4/6mm	o		86120001
		ID-OD ø 5/8mm	o		86120002
		ID-OD ø6/12mm	o		86120000
		ID-OD ø9/12mm	o		86120003

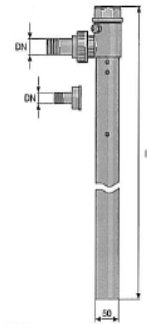


System and Equipment Engineering Accessories Dosing Pumps

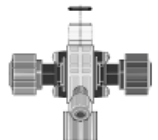


Accessories Dosing Pumps Alpha, Beta, Gamma

Name of Item	Accessory	Item No.
Suction lance for IBC and casks, with flat switch, single-point	Power supply in head, via cable, length 1200 mm	single backpressure 86311100
	Hydraulic connection M20x1,5 for connection	double backpressure 86311104
Suction lance for pails, with float switch, single point	Power supply in head, via cable, length 1200 mm	single backpressure 86311200
	Hydraulic connection M20x1,5 for connection	
Foot valve with weight	Hydraulic connection M20x1,5 for connection kit	86130400
Multi-function valve for direct installation to pump head	Pressure retention valve, opening pressure approx. 1,5 bar	86120010
	Pressure relief valve, opening pressure approx. 10 bar	
PVC fabric hose	ID-OD ø 6/12	86340000
PE pressure hose	10bar Documented permissible operating pressure at 20°C	ID-OD ø 4/6 86340100
PTFE hose	10bar Documented permissible operation pressure at 20°C	ID-OD ø 4/6 86340101
Dosing valve PPE	Housing made of PPE, washers made of EPDM Connection 6/12	86130000
Dosing valve PVT	Housing PVDF, washers PTFE Connection 6/12	86130001



Dosing Pumps



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System and Equipment Engineering

Accessories Dosing Pumps



Accessories Dosing Pumps

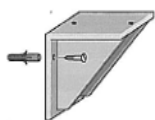
Dosing Pumps



Name of Item		Alpha Beta Gamma	Delta Sigma	Item No.
Adapter kit PVC/FPM	1/4" internal thread M20x1,5 Connection 6-8mm	o		86120029



Adapter kit PVC	1/4" internal thread M20x1,5	o		86120018
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Wall bracket			o	86120022
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Dosing valve PPE DN15 washer EPDM	with union nut and hose tail ø 20mm		o	86130007
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Dosing valve PPE DN10 washer EPDM	with union nut and hose tail ø 16mm		o	86130010
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Dosing valve PPE DN15 washer EPDM	with union nut and hose tail ø 20mm		o	86130013
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Dosing valve PPE DN10 washer EPDM	with union nut and hose tail ø 16mm		o	86130012
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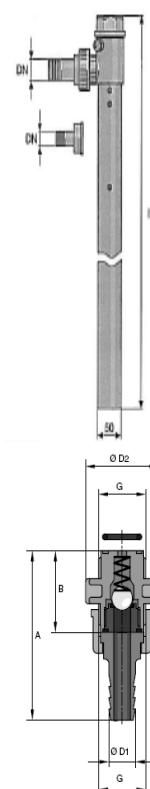
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System and Equipment Engineering Accessories Dosing Pumps

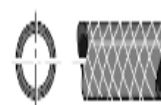


Accessories Dosing Pumps Sigma

Name of Item	Accessory	Item No.
Suction lance for IBC and casks, with float switch, single point	Power supply in head, via cable, length 1200 mm hydraulic connection via PVC hose tails	for hose ø 12/18mm backpressure DN10/15 87092616
Suction lance for IBCs and casks	Power supply in head, via cable, length 1200 mm hydraulic connection M20x1,5 for connection kit	for hose ø 19/27mm backpressure DN15 87092758
		for hose ø 25/34mm backpressure DN20 87092632
Dosing valve made of stainless steel DN15	Connection G 1" with union nut and insert	86130005
Dosing valve made of stainless steel DN20	Connection G 1 1/4" without connection elements	86130004
Dosing valve made of PVT DN20, washer PTFE	Connection G 1 1/4" without connection elements	86130011
Dosing valve made of PCB DN25	Housing made of PVC, washer FPM Connection 1 1/2" without connection elements	87092578
Dosing valve made of DN20 complete	Housing made of PP, washer EPDM Connection 1 1/4" with union nut G 1 1/4" DN20 hose tail d25-DN20 for hoses ø 25/34mm	86130008
Dosing valve adapter PVDF (injection point)	Connection G 1"	86130014
	Connection G 3/4"	86130015
Union nut	G 3/4" DN10 PVDF	86120024
PVC fabric hose	ID-OD ø 12/18mm	86340003
	ID-OD ø 19/27mm	86340005
	ID-OD ø 25/34mm	86340006



Dosing Pumps

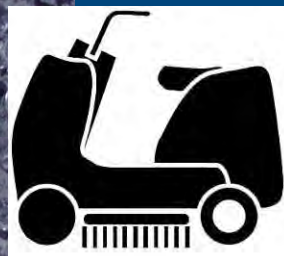


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Product Catalogue Technical Appliances

Small Dosing and Disinfection Units

Status 2012



3.00.v.0EN

System and Equipment Engineering

Soap Dispensers



Universally applicable soap or disinfectant dispenser with dispensing lever made of stainless steel. The label and filling level of the dispensing bottle are always clearly visible – even through the cover.



Soap Dispenser 1000, Plastic

Name of Item	Content	Holder	Lever	Item No.
Type T3a	1000 ml	Plastic	short	86499994
Type T3b	1000 ml	Plastic	long	86499993



Small Dosing Units

Soap/Disinfection Dispenser 500, Plastic/Aluminium

Name of Item	Content	Holder	Lever	Item No.
Type T3.1	500 ml	Plastic	short	86499996



Soap Dispenser 1000, Aluminium

Name of Item	Content	Holder	Lever	Item No.
Type T26/25	1000 ml	Aluminium	short	86499999
Type TLS/26	1000 ml	Aluminium	long	86499998



Soap Dispenser SDS 1000, Stainless Steel

Name of Item	Content	Holder	Lever	Item No.
Type SDS	1000 ml	Stainless steel	short	86499100

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System and Equipment Engineering

Spray Bottles and Equipment



Spray Bottles, Plastic

Name of Item	Content	Housing	Suction	Item No.
McProper	500 ml	Plastic	Flexible hose	80100092
Spray bottle (incl. Spray head)	1000 ml	Plastic	PE pipe	26000200
Spray head		Plastic		26002600



Pressure Sprayers

Name of Item	Content	Housing	Lever	Item No.
DS, yellow	1500 ml	Plastic	Pistol	87093393
DS, yellow	7000 ml	Plastic	Injector	87093789
DS, yellow	9000 ml	Plastic	Injector	86510207



Small Dosing Units

Dosing feeders and drain tap

Name of Item	Material	Item No.
Dosing for 1L	20 ml	PE 250 mm 26000120
Drain tap	22-30 L	PE 61 mm 26000013
Drain tap	5-10 L	PE 51 mm 26000012



Barrel Wrench

Name of Item	Material	Item No.
IBC wrench AST	PE, black	For two sizes 26000090



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System and Equipment Engineering

Small Dosing Units



Plastic Dosing Unit AccuDose II

By pressing the dosing button, you can automatically dilute chemical concentrates for e.g. sprayers, buckets, sinks or scrubber driers. Chemical concentration can be controlled simply by exchanging individual nozzles. By pressing the green button, the chemical is sucked in via the water flow and mixed with the water. Available in four variants preparing one, two, three or four different cleaning or disinfection mixtures.

Benefits

- Direct admixture of chemicals via water flow
- Saves time, as no manual dosing required
- Exact dosage of required chemicals
- Easy to use/operate at the push of a button
- No power supply required
- Functional parts DVGW approved (EN 1717)
- Optional: bottle activation
- Optional: buttons available in various colours



Scope of delivery/connection equipment:

Suction hoses, PVC, 6 mm ID x 2.1 m long
 Drain hose, PVC, ½" ID x 1.2 m (0.2 ml when bottle is filled)
 Suction valve unit and weight, dosing nozzle kit, installation kit, hook for drain hose (not when bottle is filled up), user manual



Name of Item	Dosing station	Dilution ratio	Housing	Flow rate	Item No.
AccuDose II-1	1-fold	3:1 to 350:1	Plastic	14 l/ min	86560010
AccuDose II-2	2-fold	"	Plastic	"	86560011
AccuDose II-3	3-fold	"	Plastic	"	86560012
AccuDose II-4	4-fold rotary knob	"	Plastic	"	87093809

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System and Equipment Engineering Small Dosing Units - Equipment



Dosing Unit AccuDose II Equipment/Spare Parts

Name of Item	Accessories	Item No.
Extended E-GAP component	Component, 14 l/h	86560015
Weight, spare part 15	Ceramic weight	86560016
Foot valve, spare part 16	Foot valve, PVC	86560017
Drain hose, spare part 13b	Drain hose 14 l/h	86560018
Armoured Tube	1,5 m, 90° fitting, SS 3/4" internal threat	80100023

Small Dosing Units

System and Equipment Engineering Small Dosing Units



Dosing Units MX-10x

By pressing the dosing button, you can automatically dilute chemical concentrates for e.g. sprayers, buckets, sinks or scrubber driers. Chemical concentration can be controlled simply by exchanging individual nozzles. By pressing the relevant button, the chemical is sucked in via the water flow and mixed with the water. Available in three variants preparing one, two or three different cleaning or disinfection mixtures.

Benefits

- Direct admixture of chemicals via water flow
- Saves time, as no manual dosing required
- Exact dosage of required chemicals
- KIWA certified (based on EN 1717)
- Easy to use/operate at the push of a button
- No power supply required
- Plastic housing

Scope of delivery/connection equipment:

Suction hoses, PVC, 6 mm ID x 2 m long

Drain hose, PVC 12 mm ID x 1.8 m

Suction valve unit and weight, dosing nozzle kit, installation kit, hook for drain hose, user manual



Name of Item	Dosing stations	Dilution ratio	Housing	Flow Rate lpm	Item No.
MX 101P	1-fold	1:725 to 1:4 (0,15 - 25%)	Plastic	15	86560023
MX 102P	2-fold	"	Plastic	15	86560024
MX 103P	3-fold	"	Plastic	15	86560025

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System and Equipment Engineering Small Dosing Units



Stainless Steel Dosing Units MX-10x

By pressing the dosing button, you can automatically dilute chemical concentrates for e.g. sprayers, buckets, sinks or scrubber driers. Chemical concentration can be controlled by simply exchanging individual nozzles. By pressing the relevant button, the chemical is sucked in via the water flow and mixed with the water. Available in four variants preparing one, two, three or four different cleaning or disinfection mixtures.

Benefits

- Direct admixture of chemicals via water flow
- Saves time, as no manual dosing required
- Exact dosage of required chemicals
- KIWA certified (based on EN 1717)
- Easy to use/operate at the push of a button
- No power supply required
- Housing made of hard-wearing, abrasion-resistant steel

Scope of delivery/connection equipment:

Suction hoses, PVC, 6 mm ID x 2m long

Drain hose, PVC 12 mm ID x 1.8 m

Suction valve unit and weight, dosing nozzle kit, installation kit
hook for drain hose, user manual



Small Dosing Units

Type	Dosing stations	Dilution ratio	Housing	Flow Rate lpm	Item No.
MX 101	1-fold	1:725 to 1:4 (0,15 - 25%)	SS	15	86560026
MX 102	2-fold	"	SS	15	86560027
MX 103	3-fold	"	SS	15	86560028
MX 104	4-fold	"	SS	15	86560029

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System and Equipment Engineering

Small Dosing Units



Hygiene Station ProWash

Thanks to its conception the stationary dosing station can be applied everywhere and is especially suitable for disinfecting floors, walls and equipment. The simple handling design and ergonomic conception of the hygiene station reduces working time and risks involved in handling cleaning concentrates. The unit does not require connection to a power grid – only connection to the service water system. The unit mixes a solvent of water and detergent/disinfectant of the required concentration; including pipe separator Type BA.

- PVC housing, extremely robust, HACCP conception
- Robust venture, minimum maintenance
- Valve and filter to prevent contamination

Technical specifications:

Operating temperature:	max. 50 °C
Operating pressure	0,5-5,0 bar
Dilution ratio:	0,5% to 10,9%
	211:1 to 11:1
Pipe separator:	Type BA (Honeywell)
Certified (EU Directive):	EN 1717

Scope of delivery:

Hygiene station including cleaning hose
Metal-jacketed connection hose, 1.5 m
Spray pistol and two 10 litre IBC holders,
equipment, user manual



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Type	Operating pressure (max.)	Product hose	Container support	Spray pistol	Weight	Dimensions L x W x H	Item No.
	[bar]	[m]	[Litre]		[kg]	[mm]	
Prowash 2	5	15	2x10	°	11,3	380 x 260 x 90	87093813

Product Catalogue Technical Appliances



Dosing Units and Peristaltic Pumps

Status 2012



4.00.v.0EN



All-in-one Dosing Unit – Dosing Computer with Pump and Conductivity Controller

The Calvatis dosing computer 9418 and the Calvatis dosing hose pump 9612 are available as an all-in-one dosing solution. The components are attached to a plate and thus ready for final installation.



Name of Item	Item No.
All-in-one dosing unit DC9418/DSP9612	86100312

Peristaltic Pump DSP 9711

The Calvatis pump DSP 9711 is an extremely robust chemical pump working on the peristaltic pumping principle. It is suitable for dosing pre-defined quantities. Thanks to its motor's high torque reserves exact dosing becomes a child's play.

General technical specifications

- Flow rate 125 l/h
- Continuous operation of 89%/h permissible
- Hose outlet 13 mm



Name of Item	Item No.
DSP 9711	87091530

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System and Equipment Engineering Industrial Washing



Dosing Units
Peristaltic Pumps



Conductivity Controller DC

The Calvatis conductivity controller DC 9418 mcs for conductivity sensors (stainless-steel and carbon electrodes) represents a universal control unit with versatile adjustment features. Its universal power supply ranging between 180 - 264 V, 50 - 60 Hz, and its activation outputs ensure high operational flexibility. Service hour meter, the possibility to compensate conductivity temperature, display of operational and status messages, comprehensive configuration options and the option to encode the system to prevent unauthorized access allow for maximum operational flexibility, too.

Name of Item		Item No.
DC 9418	Conductive	86020108
DC 2018	Inductive	86020110

Peristaltic Pump DSP



The dosing unit DSP 9619 is designed for a multitude of applications based on non-pressurised dosing (< 0.5 bar) of liquids. Its extremely robust direct-current motor allows for a wide output range from 50 to 1000 mlpm.

Technical specifications
Dimensions (LxWxH): 180 x 148 x 88 mm
Hose outlet: 9 mm
Power supply: 230 V
Recommended output: 25 l/h

Name of Item		Item No.
DSP 9612		86100325

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System and Equipment Engineering

Persistaltic Pumps



Dosing Units
Peristaltic Pumps



Compact Series

The **Compact R** peristaltic pumps were conceived to continuously dose pre-defined quantities (e.g. detergents). The pumps' output may be controlled via an integrated potentiometer. The pumps of our **Compact Series** offer excellent value for money. The scope of delivery includes the required equipment such as tank connector, suction jig and feeding hoses.

Concept Series

Depending on how dirty dishes are, the conductivity-controlled dish-washing and dosing unit **Concept 2114 mcs** admixes only as much washing-up liquid as is dissipated in the washing bath of the alkaline tank due to soiling and water loss. The conductivity-controlled cleaning pump **Concept 2114 mcs** stands for a dosing unit optimizing day-to-day operating costs. After connection, the pump's sensor – a conventional stainless-steel or carbon electrode – continuously records the conductivity of the washing mixture and thus the concentration of the washing-up liquid.



Concept 9911

Peristaltic pump suitable for dosing pre-defined quantities. High torque reserves ensure exact dosing under various conditions.

Hose outlet:	6 mm
Power supply	180-264 V
Conductivity indicator:	none

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System and Equipment Engineering Industrial Rinsing



Concept 2114 mcs

Ideal option for dosing small quantities. Pump output can be set via rotor speed. Thanks to high torque reserves exact dosing – also of small quantities – becomes a child's play. The pump offers six operation modes (adjustable output, time-lag relay offering two relay times, adjustable relay time, conductivity controller [0.5 - 15 ms/cm or 15 - 150 ms/cm]).



Dosing Units
Peristaltic Pumps

Name of Item	Output ml/min	Recommended maximum output	Metering range	Item No.
Compact R	2-75	4,5 l/h	-	86100319
Compact K	0,9-10	0,6 l/h	-	86100332
Concept 9911/ 30	500		-	86100328
Concept 9911/ 03	50		-	86100330
Concept 2114 mcs	2-250	7,5 l/ h	0,5-25 ms/cm	86100317
Concept 2105 mcs	3-150		0,5-25 ms/cm	86100323

System and Equipment Engineering

Dosing Units and Peristaltic Pumps - Equipment



Dosing Units Peristaltic Pumps



Equipment

Name of Item	Accessory	Compatible with	Item No.
Standard hose	PS 140 - 6,4 x 2,4 PH	Compact R	86110302
	PS 135 - 4,8 x 1,6 TGG	Compact K	86110334
	DSPN 136 - 6,4 x 2,4 PH	Concept 2105 Concept 2114 Concept 9911	86110337
Hose support system	9911/ 4,8 - 5 x 1,5	Compact R/ K	86110326
	9911/ 6,4-6 saffron	Concept 2105 Concept 2114 Concept 9911	86110314
Rotor type	Hose spigot 6mm	Concept 2105 Concept 2114 Concept 9911	86110324
Standard probe	Hose spigot 6mm	Concept 2114	86020312
LF Sensor inductive	Hose spigot 6mm	Concept 2105	86020317
Pumps housing cover		Concept/ Compact	86110323
Empty housing with cover	For dosing housing	DC 9418 DC 2018	86110333
Tank connector	Hose ø 6mm		87091604
	Hose ø 8mm		87093080
PVC Hose ø 8mm	Blue		86340105
	Transparent		86340106

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System and Equipment Engineering

Dosing Units and Peristaltic Pumps - Equipment



Dosiergeräte
Schlauchpumpen

Dosing Units and Equipment

Name of Item	Accessory		Item No.
LF- electrode ILFS-01	5m		86020314
inductive	10m		86020315
	15m		86020318
	20m		86020316
Standard hose PS 230	6,4 x 2,4 PH		86110306
Rotor			86110318
Hose support			86110315
Pump housing			86110316
Stainless-steel electrode Conductive	Type EE 65-25-10	Metering, range ca. 0,5-25 ms/cm	86020312
	Type EE 65-25-10	ca. 2-150 ms/cm	86020307
	Type EE 65-25-10-KTY	ca. 0,5-25 ms/cm	86020313
Carbone electrode Conductive	Type KE 13-5-36-SS with temperature sensor	ca. 0,5-25 ms/cm	86020304
	Type KE 6-5-36-SS	ca. 2-150 ms/cm	86020319
Metering range extension		ca. 2-150 ms/cm	86020324
Hose tail	1/4 ID SS		86200815
6mm	1/8 ID SS		87092603
PVC-fabric hose	ø 6/ 12 mm		86340000
	ø 9/15 mm		86340001
Backpressure valve for suction lance	Hose ø 6/ 8mm		87092549



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System and Equipment Engineering

Dosing Units and Peristaltic Pumps - Equipment



Dosing Units Peristaltic Pumps



Equipment

Name of Item	Accessory		Item No.
IBC suction lance	4m PVC fabric hose	L=1200mm Ø6/ 12mm	86311107
	4m PVC fabric hose	L=1200mm Ø9/ 15mm	87091992
IBC suction lance	4m PVC-fabric hose	L=600mm Ø6/ 12mm	87091991
	4m PVC-fabric hose	L=600mm Ø9/ 15mm	86311106
	5m PVC-fabric hose	L=600mm Ø5/ 8mm	86311203
	5m PVC-fabric hose	L=350mm Ø5/ 8mm	86311108
IBC suction lance	w/o hose and backpressure valve	L=1200mm	87092436
IBC suction lance	w/o hose and backpressure valve	L=600mm	86311109
Level indicator	Optical		86010902
	Optical and acoustic		87092141
Level sensor	For IBCs		86010900
Suction lance foot	Floating gauge with cable		86311004



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System and Equipment Engineering

Dosing Units and Peristaltic Pumps - Equipment



Dosing Computer: Twin Box Evo 40 LL Plus Conductive/inductive

Dosing Units
Peristaltic Pumps



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Dosing computer for all dishwashers with liquid detergent and rinse aid dosage.

Benefits

- Compact
- Easy to use/operate
- Equipment included
- IP 65

Optional

Conductivity probe (LF) with temperature sensor for compensation



Operating modes:

Detergent: Conductivity/time

Rinse aid: Speed/time/On/Off

Power supply: 100 – 240 V AC
50/60 Hz

Scope of delivery



Accessory:
Extension cable



Name of Item	Output detergent l/h	Output rinse aid l/h (<3 bar)	Metering range ms/cm	Item No.
Twin dose Evo 40 LL Plus	0,9-9,0	0,06 - 1,5	0,5-10	87093769
Extension cable(15m)				87093815

Product Catalogue Technical Appliances

Sumps

Status 2012

cal^vatis
calgonit
industrial



5.00.v.0EN

Plastic Sumps with DIBt Approval

German legal regulations provide that single-walled IBCs for combustible and non-combustible liquids must be stored in or on sumps.

The capacity of a sump must be equal to the capacity of **the biggest stored IBC**, however **to at least 10%** of the stored quantity. If storage is permissible in a water reserve, sumps must be dimensioned such that catchment of the entire stored quantity is ensured.

Sumps



Storage
-without-
grating



Storage on sump
-with-
PE grating



For all container sizes



System and Equipment Engineering Sumps



Plastic Sumps with DIBt Approval

Name of Item	For easy access by fork-lift truck	Sumps capacity	Max. carrying capacity kg (if evenly loaded)	Length cm	Width cm	Height cm	PE grating	Colour	Item No.
AW-2K-PE		40	100	80	60	12		Black	86704550
AW-2K-PE		60	150	72,5	52,5	23,5		Black	86704532
AW-K-PE		200	500	124	83	32		Black	86704521
AW-2F-PE		200	500	124	83	32	o	Black	86704507
AW-K-PE	o	200	500	124	83	42		Black	86704505
AW-2F-PE	o	200	500	124	83	32	o	Black	86704519
AW-K-PE		200	800	124	84,5	28,5		Blue/yellow	86704501
AW-2F-PE		200	800	124	84,5	31	o	Blue/yellow	86704502
AW-K-PE	o	200	800	124	84,5	35		Blue/yellow	86704522
AW-2F-PE	o	200	800	124	84,5	38	o	Blue/yellow	86704506
AW-2K-PE	o	225	1600	124	124	26,5		Blue/yellow	86704524
AW-4F-PE	o	225	1600	124	124	29,5	o	Blue/yellow	86704509
AW-C1-PE	o	1000	2000	176	141	66	o	Blue	86704504
AW-C2-PE	o	1000	2x2000	248	141	49	o	Blue	86704508

Sumps

Container Cart

Mobile container cart for standard containers (200 - 230 litre) made of robust, dirt-resistant material

Benefits

- Easy and safe transport and storage of containers holding chemical substances
- Highly resistant to load (up to 300 kg)



Detail: Hole for hose



Optional with trailer



Accessory: Container claw

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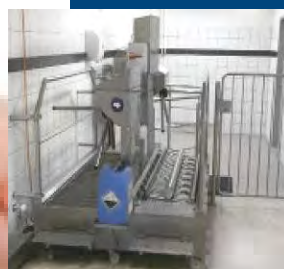
Name of Item	Capacity L x W x H (mm)	Capacity Litre	Weight (kg)	Item No.
Container cart	800x600x1360	400	34	8709xxxx
Container cart with trailer	800x600x1360	400	37	8709xxxx
Container claw				8709xxxx

Product Catalogue Technical Appliances



Personal Hygiene Hygiene Technological Systems

Status 2012



6.00.v.0EN

System and Equipment Engineering

Waste Baskets and Miscellaneous



Wastepaper Baskets

Name of Item	Type/Dimension Length x Width x Heights [mm]	Volume [Litre]	Item No.
PK	Wire Mesh Basket, SS 350 x 250 x 400	35	86800005
PKDW	Wire Mesh Basket Steel, white, coated 300 x 180 x 360	20	868000xx
PKL	Perforated Sheet Metal Basket, SS 350 x 280 x 420	20	8680000xx
MSH	Trash Bag Holder, SS	120	868000xx



Personal Hygiene

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System and Equipment Engineering Dispenser



Paper Towel Dispenser

- Lockable (optional), with window
- Paper dimensions 95x230 mm

Name of Item		Capacity	Item No.
HSU31E	Folded paper	to 600 pieces	868000x
HSUE	Rolled paper	1 role	86800004



Dispenser

For protective mouth masks, hairnets, etc.

Name of Item	Item No.
EMS	86800015



Personal Hygiene

Coat Dispenser

Name of Item	Capacity	Item No.
EMS/30	30	86100787



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Hand Hygiene Centre

Personal Hygiene



Hand Washing Basins and Washing Troughs



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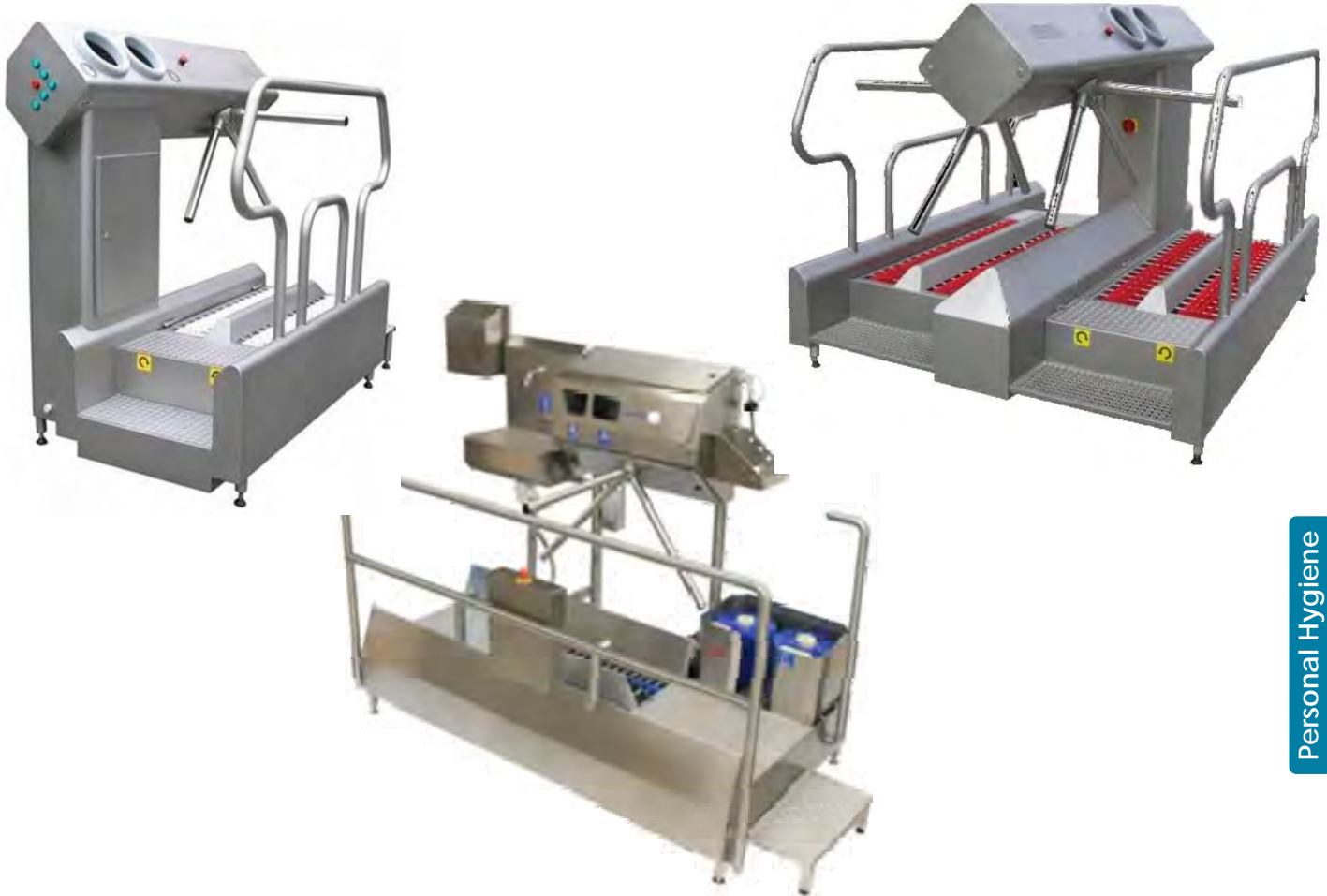
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Pass-Through Hygienic Cleaning Combination



Personal Hygiene

Shoe Soles and Boots Cleaners



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Compact Hygiene Stations



Personal Hygiene

Lockers/Boot Dryers/Apron and Boot Washing Cabinet



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Appendix

